**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of the claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method ~~of producing diversity-encoded spread-spectrum signals for transmission into a wireless communication channel~~ comprising:

generating a spread information signal,

generating a despreading signal,

diversity-encoding at least one of the spread information signal and the despreading signal, and

<u>transmitting diversity-encoded spread-spectrum signals by</u> coupling the spread information signal and the despreading signal into ~~the~~ <u>a</u> wireless communication channel.

2. (Currently Amended) The method of ~~producing diversity-encoded spread-spectrum signals recited in~~ claim 1 wherein the despreading signal comprises a noise signal.

3. (Currently Amended) The method of ~~producing diversity-encoded spread-spectrum signals recited in~~ claim 1 wherein <u>the step of</u> generating ~~the~~ <u>a</u> spread information signal ~~includes~~ <u>further comprises</u> duplicating the spread information signal.

4. (Cancelled)

5. (Currently Amended) The method of ~~producing diversity-encoded spread-spectrum signals recited in~~ claim 1 wherein ~~diversity encoding~~ <u>diversity-encoding</u> includes at least one item of a set comprising providing a time offset, polarizing, applying a predetermined directionality, transmitting from a plurality of spatially separated transmitters, modulating with a predetermined carrier frequency, combining with a carrier having a predetermined mode, and transmitting the signals in at least one predetermined subspace channel.

6. (Currently Amended) The method of ~~producing diversity-encoded spread-spectrum signals recited in~~ claim 1 further comprising a step of modulating the spread information signal and the despreading signal onto a carrier signal.

7. (Cancelled)

8. (Currently Amended) A method ~~of producing diversity-encoded spread-spectrum signals for transmission into a wireless communication channel~~ comprising:

generating ~~at least one~~ <u>an</u> information-bearing wideband signal,

generating ~~at least one~~ <u>a</u> decoding signal,

diversity-encoding at least one of the information-bearing wideband signal and the decoding signal, and

<u>transmitting diversity-encoded spread-spectrum signals by</u> coupling the ~~spread information~~ <u>information-bearing wideband</u> signal and the ~~despreading~~ decoding signal into ~~the~~ <u>a</u> wireless communication channel.

9. (Currently Amended) The method of ~~producing diversity-encoded spread-spectrum signals recited in~~ claim 8 wherein the information-bearing wideband signal includes a noise signal.

10. (Cancelled).

11. (Currently Amended) The method of ~~producing diversity-encoded spread-spectrum signals recited in~~ claim 8 wherein the step of ~~diversity encoding~~ <u>diversity-encoding</u> includes at least one item of a set including providing a time offset, polarizing, applying a predetermined directionality, transmitting from a plurality of spatially separated transmitters, modulating with a predetermined carrier frequency, combining with a carrier having a predetermined mode, and transmitting the signals in at least one predetermined subspace channel.

12. (Currently Amended) The method of ~~producing diversity-encoded spread-spectrum signals~~

~~recited in~~ claim 8 further comprising a step of modulating the information-bearing wideband signal and the decoding signal onto a carrier signal.

13-15. (Cancelled)

16. (Currently Amended) A spread-spectrum transmitter comprising:

a wideband-signal generator configured for generating a plurality of wideband signals, at least one of the plurality of wideband signals being ~~designated as~~ a despreading signal,

a modulator coupled to the wideband signal generator and configured for modulating at least one information signal onto at least one of the plurality of wideband signals for generating a ~~spread-spectrum~~ spread information signal,

a diversity processor configured for adjusting at least one diversity parameter of at least one of the ~~spread-spectrum~~ spread information signal and the ~~decoding~~ despreading signal, and

a transmitter configured for transmitting diversity-encoded spread-spectrum signals by coupling the ~~spread-spectrum~~ spread information signal and the despreading signal into ~~the~~ a wireless communication channel.

17. (Currently Amended) A spread-spectrum transmitter comprising:

a wideband-signal generator configured for generating a plurality of wideband signals, at least one of the plurality of wideband signals being ~~designated as~~ a ~~despreading~~ decoding signal,

a modulator coupled to the wideband signal generator configured for modulating information onto at least one of the plurality of wideband signals for generating ~~a spread-spectrum~~ an information-bearing wideband signal,

a diversity processor configured for adjusting at least one diversity parameter of at least one of the ~~spread-spectrum~~ information-bearing wideband signal and ~~at least one of~~ the ~~plurality of wideband signals~~ decoding signal, and

a transmitter configured for transmitting diversity-encoded spread-spectrum signals by coupling the ~~spread information~~ information-bearing wideband signal and the ~~despreading~~ decoding signal

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into ~~the~~ <u>a</u> wireless communication channel.

18-19. (Cancelled)